



Phase 3 Pilot Expansion – Pilot Plan

EXECUTIVE SUMMARY

The Indiana National Electronic Disease Surveillance System (I-NEDSS) is a web-based application that promotes the collection, integration, and sharing of data at federal, state, and local levels. The purpose of I-NEDSS is to automate the current process for reporting Lab Reports, Communicable Disease Reports (CDR), and Case Investigations. Eventually, I-NEDSS will replace the paper-based reporting and case investigation system currently in use. Benefits of I-NEDSS include an increase of speed, accuracy, and accountability in our disease surveillance. This will be accomplished by having all reporting and investigation forms accessed, completed, and submitted electronically.

I-NEDSS is above all else, a tool to support the reporting process outlined in IAC 410 (http://www.in.gov/isdh/files/comm_dis_rule.pdf). For the Local Health Departments (LHD), this tool will assist with data gathering and notification and reporting of disease investigations.

In I-NEDSS v2 we released the Notification Module, which focuses on the communication of Lab Reports and CDRs to the appropriate investigative unit at the local or state level. The role of moving communications between the various entities, including reference lab, hospital, Infection Control Practitioner (ICP), LHD, Field Epidemiologist, and the ISDH Epi Resource Center Subject Matter Expert was piloted for functionality and accuracy.

In I-NEDSS v3, we released the Case Investigation Module, which focuses on the completion and electronic submission of a Case Investigation. Additional enhancements are planned for allowing LHDs the ability to run historical and QA type report queries. Case Investigations will be reported to CDC by the ISDH in a similar manner as they are reported currently. In addition, Case Investigation data will be utilized as part of the ISDH Outbreak Management System (OMS) at the ISDH Epi Resource Center.

I-NEDSS is currently an ISDH development effort based in Public Health Preparedness Emergency Response (PHPER) Commission and championed by project sponsorship from the Epidemiology Resource Center (ERC). Funding source is the CDC's Preparedness Cooperative Agreement Grant with supplemental funding provided by the CDC's Epidemiology and Laboratory Capacity (ELC) Grant.

To ensure I-NEDSS meets the needs of the LHDs, we are expanding the pilot process to allow for feedback from additional LHDs who will join the I-NEDSS Project Team in an evaluation of I-NEDSS.

The expectation of the pilot LHD group is as follows:

- Provide constructive feedback on the ability to use the I-NEDSS Notification Module within the context of day-to-day operations at the Local Health Department (LHD).
- Availability of LHD staff for I-NEDSS training
- Commitment to utilize I-NEDSS within LHD operations
- Participation in regular progress meetings during the ramp-up and pilot period
- Participation in after-action process upon completion of the pilot
- Assistance in establishing commitments from local practitioners who submit communicable disease reports to local health departments to submit them electronically
- Understanding that this is an early version of I-NEDSS and this pilot process will be used to further improve I-NEDSS for later release statewide.

The I-NEDSS Project Team is targeting the Expanded Phase 3 Pilot to begin November 1, and continue for the duration of 2008. During that time, the LHD would be submitting all case investigations via I-NEDSS.

Please review this document, and the additional documentation which is available at the LHDResource website (<https://myshare.in.gov/isdh/lhdresource/default.aspx>) if you wish to participate in the expanded pilot.



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I-NEDSS PILOT – Phase 3

LHDs currently participating in the pilot are Hamilton, Hendricks, Johnson, Floyd, Kosciusko, and Putnam Counties. These counties were chosen for the pilot effort based on their participation in the City Readiness Initiative (CRI), and for the coverage that these counties receive from Regenstrief Institute as part of the Indiana Network for Patient Care (INPC - <http://www.inpc.org>).

Regenstrief Institute provides a major source of Electronic Laboratory Reporting (ELR) data for I-NEDSS with the Communicable Disease Processor (CDP) Data Feed.

Floyd and Kosciusko LHDs have worked directly with their hospital Infection Control Practitioners (ICP) to deploy I-NEDSS inside the hospital for the ICP to enter CDRs. This is their primary source of data. In addition, Floyd Memorial Hospital is piloting a Lab Reporting Entry Screen, which will allow for low-volume labs to data-enter the test results and report directly to ISDH via I-NEDSS.

The expanded pilot is expected to take an additional four to nine counties, raising the total number of LHDs participating in the I-NEDSS Project to 10-15 LHDs. Based on the limited resources currently available to the I-NEDSS Project Team, this is the maximum amount of LHDs that will be eligible to participate prior to Statewide Rollout in 2009.

LHDs seeking to enter the pilot program must complete the application process outlined in this document and submit it to ISDH for review. LHDs who enter the pilot program will be working directly with the I-NEDSS Project Team to complete the I-NEDSS Pilot Goals.

I-NEDSS PILOT GOALS – Phase 3

1. Validate the process of receiving an observation (ELR, CDR, or a direct phone-call/email for a reportable condition), and moving that observation through the Notification Process, sending it ultimately to the appropriate local or state investigative authority.
2. Validate the process of completing an electronic Case Investigation (CI) form within the I-NEDSS Case Investigation Module.
3. Validate the process of submitting the Case Investigation to the Epidemiological Resource Center (ERC) at the ISDH with an appropriate case status.
4. Deploy and test in real-world scenarios the electronic Case Investigation forms for Notifiable Conditions as defined by IAC 410 (http://www.in.gov/isdh/files/comm_dis_rule.pdf)
5. Provide continuous feedback regarding functionality, ease of use, process, recommendations and desired modifications.
6. Identify local practitioners and/or hospitals that do volume submission of CDRs to LHDs and target for use of the electronic CDRs.
7. Make adjustments to the I-NEDSS application based on feedback from the Pilot Local Health Departments and any other investigative units, with the ultimate goal of rolling the application out statewide in 2009.



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I-NEDSS PILOT TIMELINE – Phase 3

09/12	Open Call to LHDs seeking volunteers for the I-NEDSS Expanded Pilot
09/15	Application Period Begins. LHDs submit applications to be selected as part of the pilot.
10/10	DEADLINE for submission of application to be selected as part of the pilot
10/13	I-NEDSS Project Team makes final selection on pilot expansion and notifies applicants
10/14 – 10/17	Training will be scheduled with LHDs in the expanded pilot
10/20 – 10/31	Training will be conducted with LHDs in the expanded pilot
11/03	All LHDs in the expanded pilot are live on I-NEDSS
11/17	Optional User Group Conference Call with Pilot LHDs and ERC Field Epis
12/15	Optional User Group Conference Call with Pilot LHDs and ERC Field Epis
01/07	Optional User Group Conference Call with Pilot LHDs and ERC Field Epis

I-NEDSS Expansion Selection Criteria

The I-NEDSS Project Team will be responsible for the selections of LHDs into the expanded pilot. Selection criteria are listed below in priority order:

- 1) ***Commitment from the LHDs:*** The I-NEDSS Project Team is looking to measure commitment of the LHD in executing the goals of the pilot. To meet these goals, commitments must be secured not only from the County Health Officer and Administrative Staff, but also from the front-line nursing staff who will be performing the investigations. The I-NEDSS Project Team is testing a deployment model for disease surveillance which focuses on local commitment and buy-in as it relates to hospitals, physicians, and LHDs; with the LHD taking a the lead in securing commitments from organizations that report disease surveillance data directly to the LHD. The I-NEDSS Project Team is looking for a high level of commitment from the LHD to making this project a success.
- 2) ***Source of Data:*** As mentioned above, the source(s) of data you can provide to I-NEDSS is important. CDRs are a key factor in initiating an investigation, and for a majority of the counties, it will be the only method for gathering electronic data. Lab data is currently available at a state-level, but coverage areas beyond the Indiana Network for Patient Care (www.inpc.org) remain spotty at best. The more partnerships a LHD is able to form with their hospitals' Infection Control Practitioners (ICPs) and local physicians who will deliver the CDRs, the better the chances of success.
- 3) ***Availability for Training:*** Training for the expanded pilots will be conducted in-person sometime during a two-week period in late October. LHDs who can commit to training of key personnel during this time-period will be favored. LHDs who can organize training in conjunction with their local hospital personnel will be given priority.
- 4) ***Number of Investigations:*** The ability to demonstrate a high average number of investigations per month will be weighted as a priority. This criteria is a lower priority, but it would be a good situation for the LHDs to have a steady stream of investigations for which they can utilize the I-NEDSS application. The more investigations, the better able the LHD is to evaluate and improve I-NEDSS.
- 5) ***Geographic location related to an existing pilot county:*** The existing pilot counties are Hamilton, Hendricks, Johnson, Putnam, Floyd, and Kosciusko. LHDs who share a border with any of those counties will be favored in this category.

Selections will be made based on the above criteria, but rankings will not be published. All counties that apply should expect to receive word on their application status by mid-October, 2008. Counties that are not selected during the expanded pilot will be eligible for the first round of statewide rollout in 2009.



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I-NEDSS Expansion Application Process

1. LHDs will review the I-NEDSS Pilot Plan posted at the LHDResource Website (<https://myshare.in.gov/isdh/lhdresource/default.aspx>).
2. If the LHD wishes to participate, they may email their intention directly to the following email address:

(I-NEDSS@isdh.in.gov)
 - Email should contain information with regards to the above stated selection criteria
 - Email should contain a Point-of-Contact at the Local Health Department
 - Email should contain a statement from the Health Officer authorizing the LHD to participate
3. It should be the expectation of the LHD that there will be some version of follow-up by the I-NEDSS Project Team to the initial application e-mail, either via email or telephone.
4. Deadline for submission of the application is October 10, 2008 by 6pm EST.
5. Between 4 and 9 LHDs will be included in the expanded pilot.
6. LHDs will be evaluated based on their abilities to meet the published selection criteria, however scoring and/or rankings will NOT be published by ISDH.
7. All applicants will be notified on October 13 via email.
8. Successful applicants to the expanded pilot will be contacted via phone to schedule an in-person training session between the dates of October 20th and October 31st, 2008.
9. Unsuccessful applicants to the expanded pilot will be considered priority for the first round of the statewide rollout in 2009.

TRAINING PLAN

ISDH will conduct a training session that will last no longer than 3 hours. With allowed set-up and tear-down time, please expect a minimum of 4 hours onsite.

Training will take place in the following subject areas:

1. Initiating an observation (CDR or Case Investigation)
2. Responding to an observation (CDR or ELR)
3. Basic I-NEDSS roles and administration
4. Reporting Issues via helpdesk

Verification of training requirements at the LHD site will be needed prior to training:

1. Dedicated training space/room (preferred but not required)
2. Equipment (PCs, laptops, connections, other hardware requirements?)
3. Training aids (projector connected to PC, white board, flip chart, etc.) Optional, but helpful for larger groups
4. Tech support for hardware and software issues (from both IDSH and LHD)
5. System and software requirements needed to access and run I-NEDSS.
6. Confirm the number of participants prior to training in order to prepare materials
7. The course training manual will be forwarded to the LHD in a .PDF format for printing and distribution by the LHD prior to training.

This training will take place between October 20th and October 31st, 2008. Target audience of the training will be LHD Operations and Investigative Staff. ISDH field epidemiologists may be involved as participants in the LHD training. Supplemental training classes may be available for hospital staff on entering CDRs and ELRs. Please work with the ISDH Training Coordinator to schedule appropriately.



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SUPPORT PLAN

I-NEDSS Project Team includes 1st and 2nd line support.

Helpdesk support is available Monday through Friday 9am – 5pm EST.

Contact I-NEDSS@isdh.in.gov to report any problems/feedback you wish to give. You may also utilize the SUPPORT tab feature of I-NEDSS from directly inside the application.

Please include the following information in your email:

- Name
- I-NEDSS User Name
- Location / County
- Phone Number
- Email Address
- Description of Problem
- Identification Number for the ELR, CDR, or Case Investigation

I-NEDSS Project Team will catalog the issue and assign it for appropriate resolution, and will return a response to you. If additional information is required, our support team will follow-up with a phone call.

FEEDBACK

I-NEDSS Project Team is looking for constructive feedback on I-NEDSS. Please provide this information in a similar manner to contacting the helpdesk. Send feedback to I-NEDSS@isdh.in.gov. Always include your user name and contact information.

Additional opportunities for feedback will come during the I-NEDSS Pilot Status Meetings.

Finally, a survey of I-NEDSS Readiness will be conducted on the completion of the Pilot.



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TECHNICAL NOTES

I-NEDSS Minimum Technical Requirements	Not Supported by I-NEDSS
Web-based browser capabilities: <ul style="list-style-type: none">Internet Explorer v6.0 and abovePop-ups must be enabledJava Scripting is required	<ul style="list-style-type: none">NetscapeFirefoxMozilla
Internet connections <ul style="list-style-type: none">Home PC - DSL or Broadband / Cable ModemsOffice PC – T1 NetworkingAir Card	<ul style="list-style-type: none">Dial-up modems
Hardware <ul style="list-style-type: none">Windows based desktopWindows based laptopWindows based notebookMicrosoft XP or Vista Operating SystemsScreen Resolution – 1024 x 768 or above	<ul style="list-style-type: none">Macintosh desktop/laptop/notebookPalm, Blackberry or PDA-type devices800 x 600 or below
Software <ul style="list-style-type: none">Adobe Reader v7.0 or above	

USER ROLES

Organization Type	Role	Purpose
ISDH	Admin	
ISDH	User	Subject Matter Expert – Epi Resource Center
ISDH	Field Epidemiologist	Field Epidemiologist <ul style="list-style-type: none">Epi Resource CenterCase Investigator
ISDH	Data Entry	
LHD	Admin	
LHD	User	Case Investigator
Lab	Admin	
Lab	User	Entry of Electronic Lab Reporting (ELR)
Hospital	Admin	
Hospital	User	Entry of Electronic Lab Reporting (ELR)
Hospital	User	Entry of Communicable Disease Reporting (CDR)
Practitioner	Admin	
Practitioner	User	Entry of Communicable Disease Reporting (CDR)

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APPENDIX A – I-NEDSS v3.1 Features Listing

ELECTRONIC LAB REPORTS

- Regenstrief Institute Communicable Disease Processing Feed v1.0
 - INPC Participating Hospitals
 - MACL (Mid-America Clinical Labs)
 - LabCorp
 - Quest Laboratories (Central Indiana Region)
- Floyd Memorial Hospital (lab entry)
- Mayo Clinic
- Indiana State Public Health Lab

ISDH Subject Matter Expert (SME)

- Assign Function to send ELRs on to LHD
- Exception Processing for ELRs not requiring investigation
- Case Investigation Notifications
- Case Investigation Review Process
- I-MAIL, Secure email within I-NEDSS

LHD Processing Capabilities

- ELR notification and processing
- CDR notification, entry and processing
- Case Investigation (CI) entry and processing
 - Demographics
 - Epidemiological
 - Clinical
 - Risk Factor
 - Contact Worksheet
 - Investigator Comments
- Reassignment of all observations
- Dismissal of all observations
- Case Investigation Review Process
- Electronic Case Submission to ISDH
- I-MAIL, Secure email within I-NEDSS

ISDH Field Epidemiologist

- Oversight and Support of LHD Case Investigation Process
- Primary Case Investigation Processing for Vaccine Preventable Diseases (VPD)
- I-MAIL, Secure email within I-NEDSS

Hospital

- I-NEDSS Electronic Lab Report (ELR) Entry Screen
- I-NEDSS Communicable Disease Report (CDR) Entry Screen
- Submission Reporting Capabilities
- I-MAIL, Secure email within I-NEDSS

Lab

- I-NEDSS Electronic Lab Report (ELR) Entry Screen
- Submission Reporting Capabilities

Practitioner

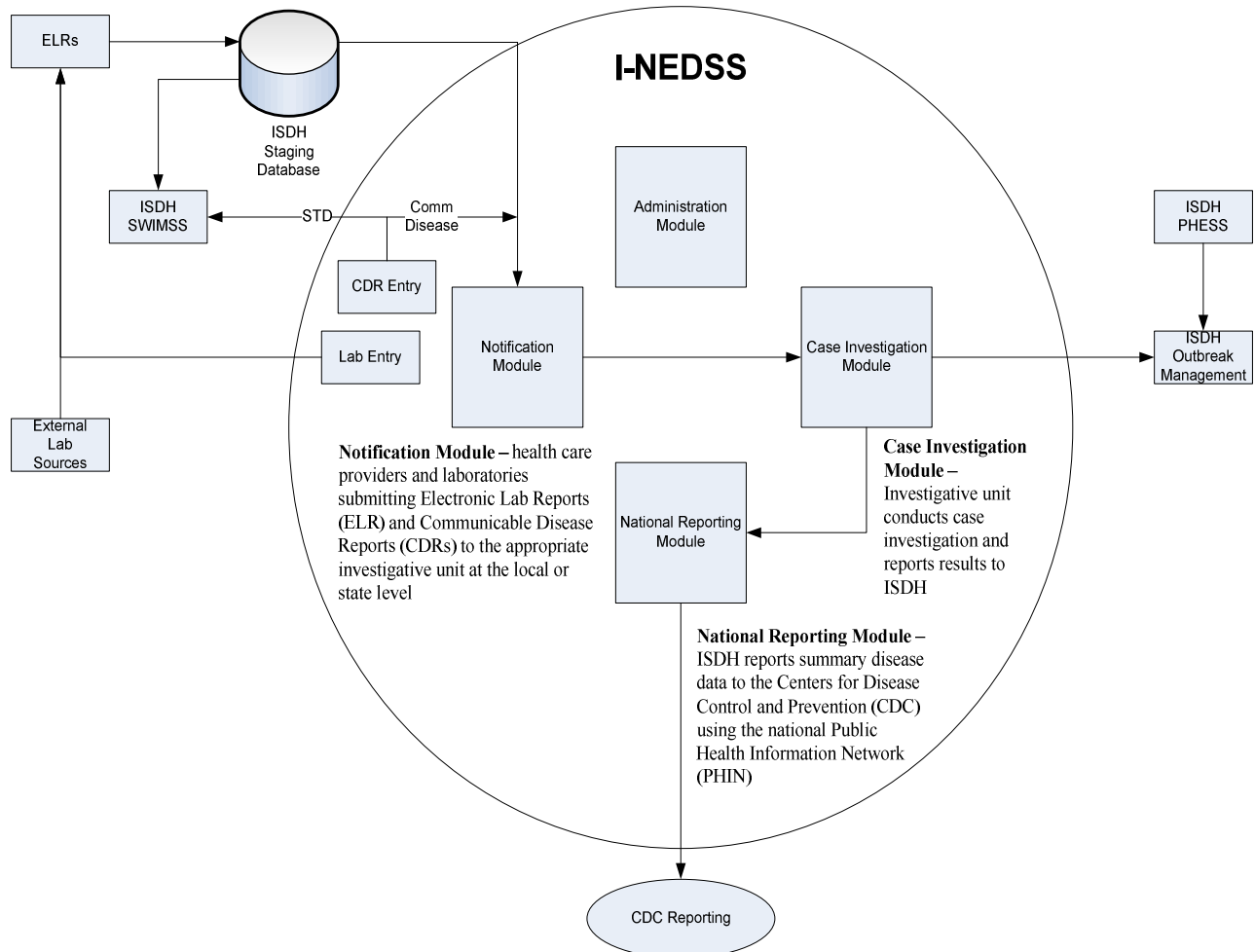
- I-MAIL, Secure email within I-NEDSS
- I-NEDSS Communicable Disease Report (CDR) Entry Screen
- Submission Reporting Capabilities

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APPENDIX B – I-NEDSS Process Flow Diagrams

I-NEDSS Process Flow Diagram – High Level

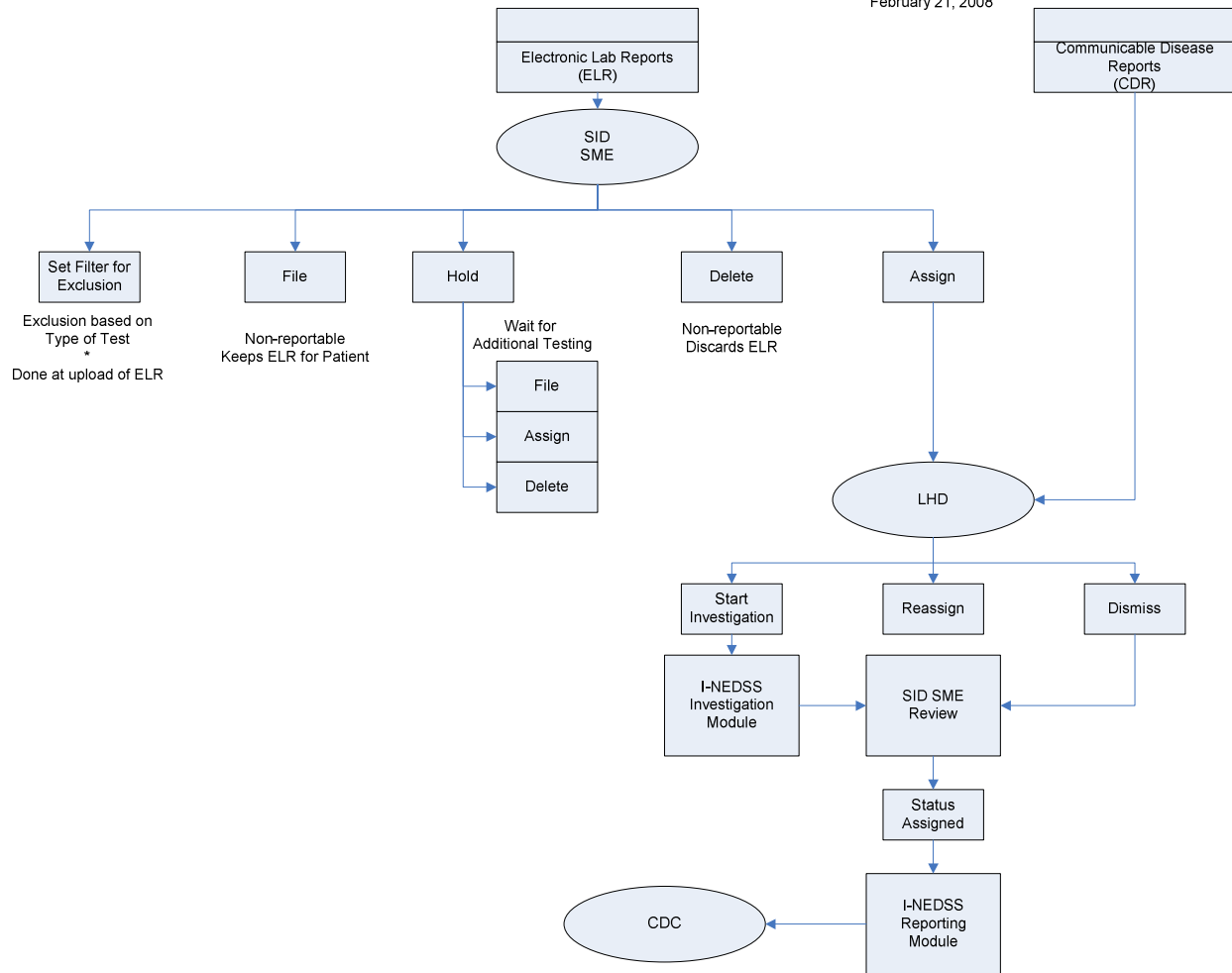
(updated: May 27, 2008)



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I-NEDSS Notification Module Process Flow

February 21, 2008



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INEDSS Case Investigation Process Flow

April 17, 2008

